REMARKS

This responds to the Office Action mailed on June 13, 2007. Reconsideration is respectfully requested.

Claims 1, 2, 5, 8, 9, 11, 12, 19, 20, 23, 24, 26 – 31, 33 and 35 – 37 are amended, and claim 34 canceled; as a result, claims 1 – 33 and 35 - 37 are now pending in this application.

Allowable Subject Matter

Claims 5, 8-18, 33, 35 and 36 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5, 8, 9, 11, and 12 have been rewritten in independent form including all of the limitations of the base claim 1 and any intervening claims. Accordingly claims 5, 8, 9, 11, and 12 are believed to be in condition for allowance. Dependent claims 10 and 13 – 15 are believed to be allowable at least because of their dependency on either claim 8 or claim 12.

Claim 33 has been rewritten in independent form including all of the limitations of the base claim 30 and is believed to be in condition for allowance.

Claims 35 and 36 have been rewritten in independent form including all of the limitations of the base claim 34 and are believed to be in condition for allowance.

§*101 Rejection of the Claims*

Claims 26-29 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Claims 26 – 29 have been amended to recite a computer-readable medium that stores instructions for execution by one or more processors. Accordingly, claims 26 – 29 are believed to be directed to statutory subjection matter.

§*103 Rejection of the Claims*

Claims 1-7, 19-32, 34 and 37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Morrow (U.S. 5,022,046) in view of Chapman et al. (U.S. 2004/0163129) and Hall et al. (U.S. 2002/0126650).

Applicant's claim 1, as amended, is directed to a method for wirelessly communicating a packet over a wideband communication channel. The wideband channel comprise a plurality of individual orthogonal frequency division multiplexed (OFDM) channels. As recited in claim 1, the method comprises communicating a channelization field on a single OFDM channel identifying which of the OFDM channels that are used for communicating subsequent wideband fields of the packet. The method also comprises communicating a wideband-header field on each the identified OFDM channels to identify sub-fields present in the wideband-header field and the presence of a wideband-data field following the wideband-header field. As further recited in claim 1, the OFDM channels that comprise the wideband channel are separated in frequency from each other (i.e., the OFDM channels do not overlap and are separated in frequency).

Applicant's other independent claims 19, 23, 26, and 30 rejected hereunder have similar recitations.

Morrow has been cited by the Examiner for communicating a packet using narrowband and wideband signaling features. Morrow's packet includes a narrowband signaling portion and a wideband signaling portion (see Morrow FIG. 4). Morrow's narrowband portion uses narrowband signaling coupled with an associated channel access protocol, such as CSMA (see Morrow abstract). Morrow's wideband portion (the data portion) uses is sent as a spread spectrum signal using a spreading sequence that is common to all nodes (see Morrow abstract). Note that Morrow's narrowband and wideband signaling portions (shown in FIG. 4) occupy the ***same frequency spectrum*** (illustrated as the height of the packet in FIG. 4). Morrow achieves an increased data transmission rate with the wideband portion through the use of spreading sequences ***common*** to all nodes of the network (i.e., the multiple access capability of spread-spectrum signaling (see Morrow abstract)). Accordingly, Applicants submit that Morrow's wideband signaling portion does not refer to additional frequency bandwidth, but refers to a different use of the same bandwidth.

Applicant's claim 1, as amended, recites that individual OFDM channels. OFDM channels use a plurality of substantial orthogonal subcarriers. OFDM channels are less prone to multipath interference which, among other things, affects the orthogonality of the subcarriers. Applicant submits that Morrow ***teaches away*** from the use of OFDM signals. Morrow states that the "anti-multipath feature [of the spread spectrum signaling] allows increased data transmission

rates on a multipath prone channel (see Morrow Abstract lines 14 – 16). Morrow apparently avoids the multipath problem with spread spectrum signaling. This concept is emphasized by Morrow (see Morrow column 9 lines 3 – 5). Accordingly, there would be no motivation to combine Morrow with another reference that uses OFDM channels, to result in Applicant's invention as recited in claim 1.

Chapman has been cited by the Examiner for increasing available bandwidth by utilizing wideband channels. In Chapman, the bandwidth of a wideband channel can be dynamically adjusted by changing the number of RF channels (see Chapman paragraph [0047]). In Chapman, each wideband cable modem (WCM) must monitor all RF channels for certain packet identifier (PID) values to determine if that data on that RF channel is for that WCM. Monitoring all RF channels is not a problem for cable modems in Chapman because RF interference is minimal and power consumption is not an important issue. For wireless communications and wireless devices, monitoring of all wireless RF channels would require synchronization with all RF channels which is more difficult with wireless communications. It would also waste resources of a wireless communication device especially when the data on the wideband channels are not for the wireless device.

Applicant's claim 1, on the other hand, has been amended to recite ***wireless*** communicating and recites that a channelization field is communicated on a ***single OFDM channel*** identifying which of the OFDM channels that are used for communicating subsequent wideband fields of the packet. Accordingly, a wireless communication device needs only to synchronize with the wideband channels when indicated by the channelization field. As mentioned above, there are significant benefits to this for wireless communications. Applicant notes that Chapman discloses a cable system that uses RF to communicate over coaxial cables (see Chapman paragraphs [0001] through [0003]). Since Chapman is not concerned with the problems associated with wireless communications (i.e., synchronization and interference), there is no motivation to combine Chapman with any of the other cited references.

Hall has been cited by the Examiner disclosing the communication of CDMA packets with a frame structure that includes training symbols and various channelization fields and

subchannels. Hall uses DS-CDMA in which the spreading factor, among other things, is changed to increase the data rate (see Hall paragraph [0041]). Applicant finds no teaching, suggestion, or motivation in Hall to use wideband channels that comprise a plurality of frequency-separated individual OFDM channels, as recited in claim 1. A DS-CDMA signal does not have any frequency separated OFDM channels. Applicant further finds no teaching, suggestion, or motivation in Hall to communicate a channelization field ***on a single OFDM channel*** to identify ***which of the OFDM channels*** that are used for communicating subsequent wideband fields of the packet. In Hall, the same frequency spectrum is used for communicating the training symbol field (TT), unlike Applicant's claim 1 which recites that a channelization field is communicated on a single OFDM channel to identify which of the OFDM channels are used for communicating subsequent wideband fields of the packet. Accordingly, combining Hall with Morrow and Chapman does not result in Applicant's claimed invention as recited in claim 1.

In view of the above, Applicant submits that the rejection of claims 1, 19, 23, 26, and 30 under 35 U.S.C. § 103(a) has been overcome and that independent claims 1, 19, 23, 26, and 30 are in condition for allowance. The dependent claims are believed to be allowable at least because of their dependency on one of the independent claims.

RESERVATION OF RIGHTS

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or

affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((480) 659-3314) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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